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FLEXURAL PIVOT FOR ROTARY DISC DRIVE ACTUATOR

Abstract of the Disclosure

The present invention provides for a flexural pivot that can be fitted
within a cavity of an actuator. The pivot includes a first member that can be
coupled to the wall defining the cavity and a second member that can be
mounted to the disc drive housing component of the disc drive. At least two
leaves join external surfaces of the first member to the second member.

The present invention offers a flexural pivot that can be easily incorporated with rotary actuators traditionally designed for use with a ball bearing pivot cartridge. In addition, it avoids the difficulties encountered by conventional designs when trying to assemble intersecting flat springs within a cylindrical sleeve. Furthermore, in comparison with conventional flexural pivots that are located outside the actuator body, the present invention provides a compact pivot that can be mounted substantially in a cavity of the actuator body such that the center of rotation of the actuator is located nearer the center of mass.